

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008775**Date Inspected:** 24-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Jia**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trail Assembly**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Lift 2 (West) Segment 2AW and 2BW

This Quality Assurance (QA) Inspector witnessed final tension verification for Traveler Rails fitted at counter weight for Lower Chevron splice plate. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification at PP 16. Bolt sizes used were M22 x 90 RC Set# DHGM220048 and final Torque required is 500 N-m; M22 x 120 RC Set# DHGM220051 and final Torque required is 433 N-m; M22 x 85 RC Set# DHGM200003 and final Torque required is 346 N-m and M22 x 160 RC Set# DHGM200006 and final Torque required is 340 N-m. Manual Torque wrench is been used with Sr. No. X02-578.

Green Tag Signed Off

This Quality Assurance (QA) Inspector signed off the Green Tag for the Bolting Tension Verification. The following are details of reports.

1. Lower Chevron Brace (South) for Segment 3AW between PP 20 Green Tag No. 259 and bolt sizes used are

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

M22*75.

2. Cable Tray Support (I Beam to T-Stiffener) for Segment 4AW+4BW between PP 24-28 Green Tag No. 260 and bolt sizes used are M19*55.

3. Cable Tray Support (I-Beam to Stiffener) for Segment 3AW+3BW between PP 19 to 23 Green Tag No. 261 and bolt sizes used are M19*55.

4. Traveller Rail Bracket for Segment 2AW+2BW between PP 13,14,15,17 and 18 Green Tag No. 262 and bolt sizes used are M22*120.

5. Traveller Rail Bracket for Segment 2AW+2BW between PP 13,14,15,17 and 18 Green Tag No. 263 and bolt sizes used are M22*90.

6. Traveller Rail Bracket for Segment 2AW+2BW between PP 13,14,15,17 and 18 Green Tag No. 264 and bolt sizes used are M20*85.

7. Traveller Rail Bracket for Segment 2AW+2BW between PP 13,14,15,16,17 and 18 Green Tag No. 265 and bolt sizes used are M20*160

8. Floor Beam Angle Brace X321 (BP Location North & South) for Segment 2AE between PP 13.5 Green Tag No. 270 and bolt sizes used are M22*75.

9. Floor Beam Angle Brace X321 (BP & SP Location North & South) for Segment 2AE between PP 13.5 and 14.5 Green Tag No. 268 and bolt sizes used are M22*55.

10. Floor Beam Angle Brace X321 (BP & SP Location North & South) for Segment 2AE between PP 14.5 Green Tag No. 271 and bolt sizes used are M22*60.

11. Floor Beam Angle Brace X321 (SP Location North & South) for Segment 2AE between PP 13.5 Green Tag No. 269 and bolt sizes used are M22*65.

Lift 2 (East) Segment 2AE

This Quality Assurance (QA) Inspector witnessed final tension verification for bolting against the Bolting notification sheet 00122 Dated Aug 25, 2009 for Longitudinal Shear Plate to Floor Beam Triangle at 1800 mm Height at PP 13; PP 13.5; PP 14 and PP 14.5. Inspected 10% on a random basis and found the tension to be in general compliance. Bolt sizes used were M22 x 80 RC Set# DHGM220050 and final Torque required is 486 N-m and M22 x 85 RC Set# DHGM220013 and final Torque required is 433 N-m. Manual Torque wrench is been used with Sr. No. X02-578.

5BE to 5CE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) with

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

ceramic backing at segment to segment transverse weld connecting segment 5BE to 5CE. The weld joint no. OBE 5A-008 welding was in progress. The welder is identified as 053742 and 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T-1.

5BW to 5CW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for deck panel I- Stiffeners. The weld joint no. DP-621-001-23; 24 and 25 and Weld Joint No. DP-627-001-23; 24 and 25 welding was in progress. The welder is identified as 066268 and 068091. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-3213-B-U3b.

5BW to 5CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Side panel hold back areas. The weld joint no. SP-472-001- 13/14; 11/12 and 9/10 welding is in progress. The welder is identified as 220067. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2132.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
